

# The Sacramento District Review

4 Lost Lodge Rd, Cloudcroft, NM 88317

575-682-2551

## Bats In Peril



- Bats In Peril

- Jack Williams

There are 27 species of bats found in New Mexico and 19 are listed for protection through Federal or State regulations. Of these 27 species, 13 are found within the Sacramento Mountains. These bats live in all vegetation types and elevation ranges. Water availability, down woody material, and snags are all important habitat components for bats.

Bats are an essential, beneficial part of the Sacramento Mountain ecosystem. Bats play critical roles in insect control, plant pollination, seed dissemination, and cave ecosystems. Consuming over half their body weight in insects each

night, bats are the major predator of night-flying insects. Bats in the Sacramento Mountains can eat thousands of tons of insects nightly.

Cave-roosting bats are important because bat guano provides vital nutrients for cave ecosystems, and is often the basis of a cave's food chain. Bat guano is used by micro-organisms and invertebrates, which become food for fish, salamanders, frogs, and other larger animals. They are even food for other animals, including hawks, raccoons, skunks, and owls.

Imagine if you couldn't see the bat emergence from Carlsbad Caverns anymore or if local agriculture producers couldn't depend on bats to keep insects from destroying their crops? This could happen if bat populations become affected by a new disease called White-nose Syndrome

(WNS). White-nose Syndrome has devastated bat populations across the eastern United States during the past four years, and according to biologists, has caused the most abrupt wildlife decline in the past century in North America. Since WNS was discovered in a single New York cave in February 2006, more than a million hibernating bats of nine species have been killed by the disease in fourteen states.

White-nose Syndrome has now moved into Canada, Maryland, Tennessee, Missouri, and Oklahoma. Ultimately, bats across North America are at risk. WNS has not currently been documented in New Mexico.

White-nose Syndrome causes bats to awaken more often during hibernation and use up the stored fat reserves that are needed to get them through the winter.



**Happy Groundhog Day to all on the 2nd day of February.**

"Away in a meadow all covered with snow  
The little old groundhog looks for his shadow  
The clouds in the sky determine our fate  
If winter will leave us all early or late."

- Don Halley

- Bat with White-nose Syndrome



February 2011

# The Sacramento District Review

4 Lost Lodge Rd, Cloudcroft, NM

575-682-2551

## Bats In Peril Cont.



- Big Brown Bat

Infected bats often emerge too soon from hibernation and are often seen flying around in midwinter. Bats affected by WNS basically starve to death, but scientists don't know what is triggering the starvation.

Studies are under way to determine if the bats are going into hibernation underweight or if they lose their body fat at an accelerated rate during hibernation. If bats lose more body fat than normal during hibernation, they do not have the energy reserves to survive until spring. If they are going into hibernation underweight, scientists will explore the

possible reasons for this.

Scientists are studying how WNS is spread. Bat to bat transmission of *Geomyces destructans* has been documented in lab condi-

tions and the geographic pattern of spread appears to support lab findings. Aspects of the geographic spread suggest that humans may transmit WNS from infected sites to clean sites. This kind of spread is most likely occurring from clothing and equipment that are not properly cleaned and decontaminated between sites. Formal testing of human-spread WNS is ongoing. Because of the devastating effects of WNS, it is critical that people assume responsibility for the potential spread of WNS. If anyone is interested in WNS or what can be done about preventing its

spread you can look up the US Fish and Wildlife Service website: [www.fws.gov/whitenose\\_syndrome](http://www.fws.gov/whitenose_syndrome). Or, contact Larry Paul, Guadalupe Ranger District Bat Coordinator at 575-885-4181.

### Bat Facts

There are over 1100 known species of bats, just about 25% of all mammal species. Most of these bats are small enough to fit in the palm of your hand.

Nearly 40% of American bat species are in severe decline or already listed as endangered or threatened. Losses are occurring at alarming rates worldwide.

Bats are very clean animals, and groom themselves almost constantly (when not eating or sleeping) to keep their fur soft and clean.

A single colony of 150 big brown bats can protect local farmers from up to 33 million or more rootworms each summer.

## Sacramento Ranger District Seeking Volunteers

Are you tired of being cooped up in the cold this winter? Would you like to get out and do something fun while serving your community? Would you like to learn about the forest ecosystem we live in? If you answered yes to any of these questions we have just the thing for you! The Sacramento Ranger District is looking for volunteers to help at our front information desk, caring for the District Office landscaping, and assisting our recreation staff maintaining trails and recreation areas. If you are interested or would like more information please call the District Office at 575-682-2551.

### - Volunteers at work



# The Sacramento District Review

4 Lost Lodge Rd, Cloudcroft, NM 88317

575-682-2551

## How Do Animals Survive Winter?



- Black Bear on The Sacramento Ranger District

- Jack Williams

winter. The shrew, a small mammal, only eats fruit, mushrooms, insects and small animals in the summer. In the winter, all they eat are insects.

There are a variety of mammals, birds, insects, reptiles and amphibians that exist on the Sacramento Mountains. Have you ever wondered how all these types of organisms make it through our tough, cold winter months? The following are examples of how they adapt to survive during the winter months.

### Mammals

- One way to survive the winter is by hibernation. Hibernation is when an animal goes into a deep sleep. The heart beat and breathing slows down. The body cools down. They don't eat food or drink water.
- Many animals change what they eat in the

- Shrews and weasels, fox, owls and hawks hunt all winter.

- Some mammals like Elk and deer move down in lower elevation where there is more forage and less snow during winter months.

- Elk, deer and rabbits search for food under the snow.

### Reptiles and Amphibians

- Cold-blooded animals, like reptiles and amphibians, also hibernate when the days grow shorter. They burrow into the mud at the bottom of their pond or lake. All winter they sleep and take oxygen into their skin from the water. They need the warmth of

their environment to heat their bodies, so they must start hibernating on time. If they're caught out on a freezing day, they will die.

- A few frogs winter buried under dead leaves on the forest floor. Their blood changes so that they won't freeze easily. Snow on top of the leaves also helps keep them from the freezing air. On the first warm day of spring, the peepers come out and start singing.

### Birds

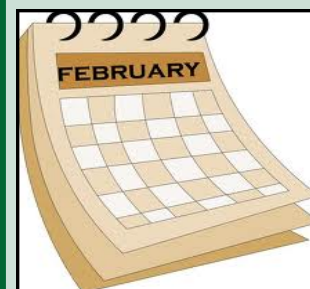
- Most birds survive the winter by going south. This is called migration.
- Some birds can stay north in the cold, like wild turkeys, chickens, hawks, and owls. They grow warm win-

### - Red Tail Hawk



Thirty days hath September, April, June, and November; All the rest have thirty-one Excepting February alone: Which hath but twenty-eight, in fine, Till leap year gives twenty-nine.

- Anonymous



### Office Hours

The Sacramento Ranger District Office is located in the Village of Cloudcroft, at #4 Lost Lodge Road, one mile south of Highway 82 on Highway 130. The office is open Monday - Friday 7:30 a.m. to 4:30 p.m. Closed on Federal Holidays.